

Overview

The MXD-1000 10.1" Modero X® Series Wall/Flush Mount Touch Panel, available in portrait (**FG5968-07**) and landscape (**FG5968-13**) models, includes a beautiful, panoramic capacitive multi-touch screen that provides users access to multiple applications with minimal navigation. This new generation of touch panels is built for usability, offering edge-to-edge capacitive touch glass with multi-touch capabilities. It features advanced technology empowering users to operate AV equipment seamlessly, while providing the ultimate in audio and video quality. With a lightning fast processor, brilliant graphics and enhanced capabilities, the Modero X Series is the control surface that simply delivers more.

For more information on installation and configuration, please refer to the *MXT/MXD-1000 Operation Reference Guide*, available at www.amx.com.

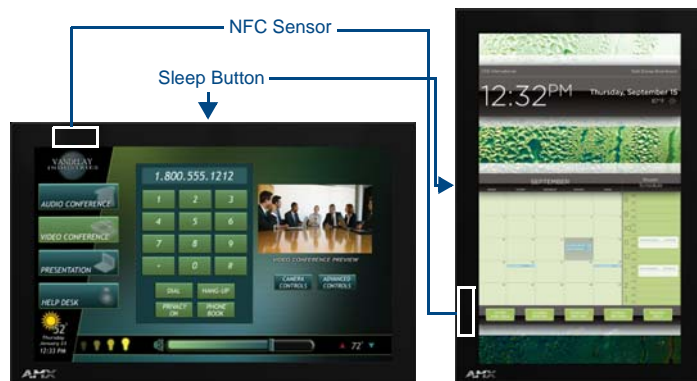


FIG. 1 MXD-1000, Landscape and Portrait

Product Specifications

MXD-1000 (FG5968-07/13) Specifications	
Power:	PoE (Power over Ethernet), 802.3af, class 3
Power Consumption:	<ul style="list-style-type: none"> Full-On: 8W maximum Standby: 3.2 W Shutdown: 1 W
Front Panel Components:	
Light Sensor:	Photosensitive light detector for automatic adjustment of the panel brightness.
Motion Sensor:	Proximity detector to wake the panel when it is approached. <ul style="list-style-type: none"> Typical Range: 1 foot (30.48 cm) Maximum Range: 3 feet (91.44 cm) Range width: 10 degrees
LED Indicator:	Camera with active indicator (Landscape only)
Sleep Button:	Single button on top of panel (Landscape) or left side (Portrait) for placing panel in sleep mode, for powering off the panel, and for accessing the Settings Pages.
Microphone:	-42dB ± 3dB sensitivity FET microphone
Speakers:	4 ohm, 2 Watt, 300Hz cutoff frequency
Camera:	HD 720P camera for video conferencing/video chat support (Landscape only).
Rear Panel Components:	
USB Port:	USB connector used for keyboard and mouse connections, or for firmware uploads.
Micro-USB Port:	5-pin Micro-USB connector used for camera video and microphone output only.
Ethernet 10/100 Port and Cable:	10/100 Base-T RJ-45 connector for Ethernet connectivity and PoE.
Touch Panel Display:	
Display Type:	TFT Active Matrix Color LCD with In-Plane Switching (IPS) technology.
Display Size:	<ul style="list-style-type: none"> Landscape: 9.9" x 6.7" (252 mm x 170 mm), 12.0" (304 mm) diagonal Portrait: 6.7" x 9.9" (170 mm x 252 mm), 12.0" (304 mm) diagonal
Viewable Area:	<ul style="list-style-type: none"> Landscape: 8.5" x 5.3" (217mm x 136mm), 10.1" (257mm) diagonal Portrait: 5.3" x 8.5" (136 mm x 217 mm), 10.1" (257mm) diagonal

MXD-1000 (FG5968-07/13) Specifications (Cont.)	
Touch Panel Display (Cont.):	
Viewing Angle:	<ul style="list-style-type: none"> Vertical: ± 89° Horizontal: ± 89°
Screen Resolution (W x H):	<ul style="list-style-type: none"> Landscape: 1280x800 Portrait: 800x1280
Aspect Ratio (W x H):	<ul style="list-style-type: none"> Landscape: 16:9 Portrait: 9:16
Brightness:	400 cd/m2
Contrast Ratio:	700:1
Color Depth:	264K colors
Backlight Type:	LED
Touch Overlay:	Projected Capacitive; Multi-touch support, 3 simultaneous max.
Communications:	
Ethernet:	10/100 port, RJ-45 connector and cable. Supported IP and IP-based protocols: UCP, TCP, ICMP, ICSP, IGMP, DHCP, Telnet, FTP, DNS, RFB (for VNC), HTTP
USB:	1 - USB host 2.0, Type A ports
Near Field Communications (NFC):	Supports standards ISO/IEC 15693, ISO/IEC 14443A, ISO/IEC 14443B; Unique Identifier (UID), Typ Range=.25", Max = .5"
Bluetooth:	HID Profile v1.1, Keyboard/Mouse Support, requires MXA-BT Bluetooth Adaptor.
Video:	
Supported Video Codecs:	<ul style="list-style-type: none"> MPEG2-TS: MPEG-2 Main Profile @High Level up to 720p at 25 fps (decode only) MJPEG up to 720p at 25 fps (decode only)
Streaming/File Formats:	MPEG-TS for MPEG-2; HTTP for MJPEG
Video Conferencing:	External application using on-board camera and microphone through Micro-USB connection (Landscape only)
Audio:	
Streaming/File Formats:	WAV, MP3
Intercom:	Full Duplex VoIP, SIP v2.0 (supported with AMX-CSG)
Operating Environment:	<ul style="list-style-type: none"> Operating Temperature: 32° F to 104° F (0° C to 40° C) Storage Temperature: 4° F to 140° F (-20° C to 60° C) Humidity Operating: 20% to 85% RH Humidity Storage: 5% to 85% RH
Dimensions (HWD):	<ul style="list-style-type: none"> Landscape: 6 11/16" x 9 7/8" x 2 5/8" (171 mm x 252 mm x 67 mm) Portrait: 9 7/8" x 6 11/16" x 2 5/8" (252 mm x 171 mm x 67 mm)
Weight:	2.0 lbs (0.91 Kg)
Certifications:	<ul style="list-style-type: none"> UL FCC Part 15 Class B C-Tick CISPR 22 Class B CE EN 55022 Class B and EN 55024 CB Scheme IEC 60950-1 IC IEC/EN-60950 RoHS
Included Accessories:	<ul style="list-style-type: none"> MXD-1000 Installation Guide (93-5968-07) MXA-CLK Modero X Series Cleaning Kit (FG5968-16) MXD-1000 Installation Template (68-5968-03) MXD-1000 Back Box (68-5968-03)
Other AMX Equipment:	<ul style="list-style-type: none"> PS-POE-AF-TC, POE Injector, 802.3af Compliant (FG423-83) MXA-BT Bluetooth USB Adaptor (FG5968-19) CB-MXP10 Rough-In Box and Cover Plate for the 10" Wall Mount Modero X Series Touch Panels (FG039-17) NXA-ENET8-2POE, Gigabit Switch, 8 Port POE, 2 Port SFP (FG2178-63)

NOTE: The MXD-1000-P-NC (**FG5968-25**) and MXD-1000-L-NC (**FG5968-26**) No Comm touch panels do not have camera, microphone, or NFC capability. These otherwise have all of the functionality of the MXD-1000 panels.

Panel Connectors and Wiring

FIG. 2 shows the connectors located on the underside of the MXD-1000. The Micro-USB port is used for camera video output.

Power for the MXD-1000 via Power Over Ethernet

Power for the MXD-1000 is supplied via Power Over Ethernet (PoE), utilizing an AMX-certified, capacitive touch-compliant PoE injector such as the PS-POE-AT High Power PoE Injector (**FG423-81**) or other approved AMX PoE power source. The incoming Ethernet cable should be connected to the RJ45 port on the MXD-1000 (FIG. 2 and FIG. 3).

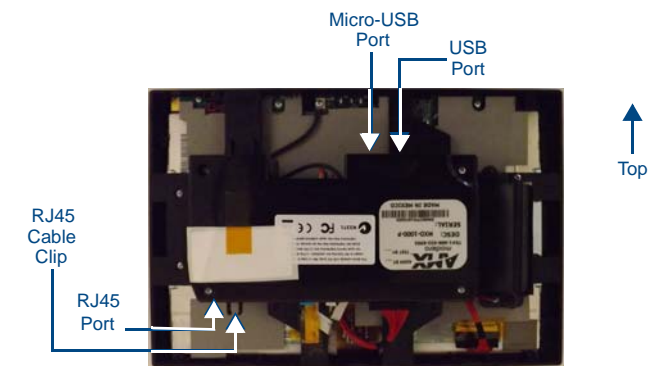


FIG. 2 Rear of the MXD-1000 (Landscape)



FIG. 3 Rear of the MXD-1000 (detail of the RJ45 connection)

Configuring the MXD-1000

The MXD-1000 is equipped with Settings Pages that allow you to set and configure various features on the panel. For more information on connecting and configuring the MXD-1000 to a network, please refer to the *Modero X Series Programming Guide*, available at www.amx.com.

Installing the MXD-1000

The MXD-1000 can be installed either directly into a solid surface environment, using either solid surface screws or the included locking tabs for different mounting options. For more information, please refer to the *MXD-1000 Operation/Reference Guide*, available at www.amx.com.

The MXD-1000 is contained within a clear outer housing known as the back box. This back box is removed when installing the device into a wall or when using the optional Rough-In Box accessory (**FG039-17**). For more information on back box removal, please refer to the *MXD/T-1000 Operation Reference Guide*, available at www.amx.com.

Installing the MXD-1000 into a wall

The back box (FIG. 4) is designed to attach the panel to most standard wall and solid surface materials. This back box has four locking tabs (two on top and two on bottom) to help lock the back box to the wall. These locking tabs are only extended AFTER the back box is inserted into the wall. Using the locking tabs is highly recommended for standard mounting surfaces such as walls. For thin walls and solid surfaces, use #4 mounting screws (not included).

WARNING: When installing the back box, make sure that the assembly is in the correct position and in the correct place. Once the locking tabs are extended and locked into place, removing the back box may be difficult without having access to the back of the wall or causing damage to the wall.

Note: In order to guarantee a stable installation of the MXD-1000, the thickness of the wall material must be a minimum of .50 inches (1.27cm) and a maximum of .875 inches (2.22cm). The surface should also be smooth and flat.

WARNING: The maximum recommended torque to screw in the locking tabs on the plastic back box is 5 IN-LB [56 N-CM]. Applying excessive torque while tightening the tab screws, such as with powered screwdrivers, can strip out the locking tabs or damage the plastic back box.

1. After ensuring proper placement, cut out the mounting surface, using the MXD-1000 Installation Template (**68-5968-03**) as a guide. Refer to the dimensions in the *MXD-1000 Operation/Reference Guide*, available from www.amx.com, for more information.

CAUTION: Making sure the actual cutout opening is slightly smaller than the provided dimensions is highly recommended. This action provides the installer with a margin for error if the opening needs to be expanded. Too little wall material removed is always better than too much.

2. Remove the back box knockouts (FIG. 4) and thread the incoming wiring through the knockout holes. To facilitate installation, thread the Ethernet cable through a bottom

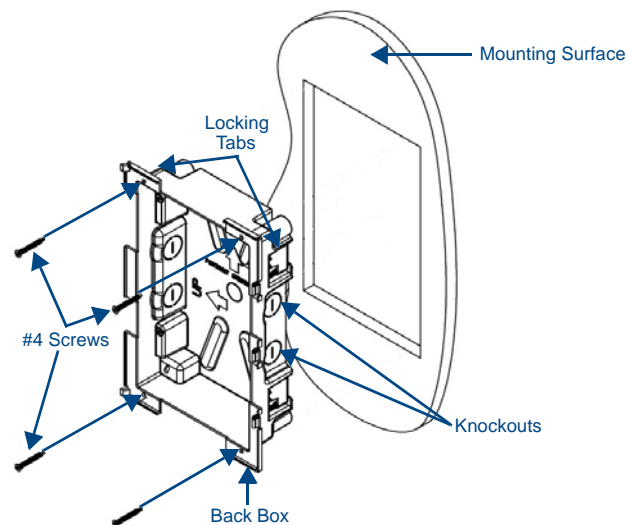


FIG. 4 MXD-1000 Back Box Installation (Portrait)

knockout (Landscape) or a right-side knockout (Portrait), and the Micro-USB or USB cables through a top knockout (Landscape) or left knockout (Portrait).

3. Thread the incoming Ethernet and Micro-USB wiring (if Micro-USB access is desired) from their terminal locations through the surface opening and through the knockouts.
4. Push the back box flat into the mounting surface and secure with either the locking tabs or #4 mounting screws (not included). In order to prevent damage to the touch panel, make sure that any screws used are flush with the back box, and the back box goes freely into the opening.
5. Insert each connector into its corresponding location along the back of the MXD-1000. Gently pull the RJ45 adapter from underneath the electronics cover (FIG. 3), attach the RJ45 cable, and push the connection back under the cover. Lock the RJ45 cable into the clip above the cable connection (FIG. 2) to facilitate the rest of the installation.
6. Test the incoming wiring by attaching the panel connections to their terminal locations and applying power. Verify that the panel is receiving power and functioning properly to prevent repetition of the installation.

NOTE: Do not disconnect the connectors from the touch panel. The unit must be installed with the attached connectors before being inserted into the drywall.

7. Latch the panel onto the top hooks on the back box and rotate it down (Landscape) onto the bottom snaps or on the left side and rotate it to the right (Portrait installation) (FIG. 5). Press gently but firmly on the ends until the snaps "click" to lock it down.

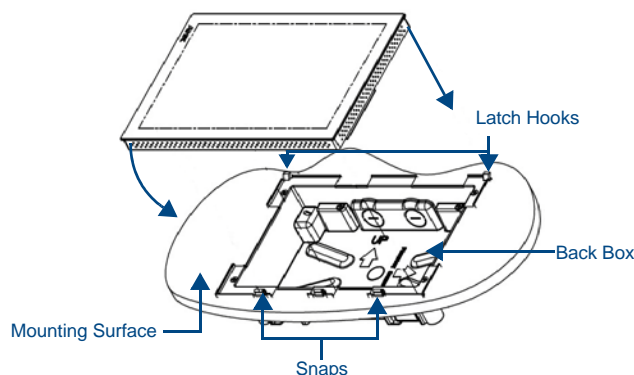


FIG. 5 Installing the MXD-1000

WARNING: If you see a gap between the panel and the back box, or feel any binding while locking down the panel, stop immediately and verify that no cables or other items are in the way. Do not force the panel into position, as this can cause damage to the touch screen or the panel electronics.

8. Reconnect the terminal Ethernet and USB to their respective locations on either the Ethernet port or NetLinX Master.

Uninstalling the MXD-1000

For information on uninstalling the MXD-1000, please refer to the *MXD/T-1000 Operation Reference Guide*, available at www.amx.com.

NOTE: For a demonstration of MXD-1000 uninstallation, please refer to the *Modero X Wall Removal video on the AMXconfigure channel on YouTube*: <http://www.youtube.com/user/AMXconfigure/>

